

FIGURE 1

| mAb | Mean Fluorescence Intensity | | % Gated | |
|------------|-----------------------------|------|-----------|------|
| | L1.2-CCR5 | PBMC | L1.2-CCR5 | PBMC |
| mouse IgG1 | 10 | 4 | 1 | 1 |
| 2D7 | 75 | 29 | 92 | 36 |
| PA8 | 48 | 9 | 73 | 3 |
| PA9 | 79 | 5 | 96 | 3 |
| PA10 | 80 | 8 | 96 | 5 |
| PA11 | 107 | 8 | 96 | 10 |
| PA12 | 115 | 8 | 96 | 8 |
| PA14 | 81 | 14 | 96 | 22 |

FIGURE 2

| INHIBITOR COMBINATION | CONCENTRATION RATIO | ASSAY | COMBINATION INDEX | |
|--------------------------|------------------------|--------|-------------------|----------------|
| | | | 90% Inhibition | 50% Inhibition |
| PA12:2D7 | 10:1 | Entry | 0.043 | 0.291 |
| | 2:1 | Fusion | 0.017 | 0.019 |
| | 10:1 | Fusion | 0.087 | 0.067 |
| | 50:1 | Fusion | 0.158 | 0.046 |
| PA12:PA14 | 10:1 | Entry | 0.437 | 0.535 |
| | 10:1 | Fusion | 0.22 | 0.263 |
| PA14:2D7 | 1:1 | Entry | 2.85 | 1.85 |
| | 1:1 | Fusion | 1.34 | 1.74 |
| PA12:PA11 | 1:1 | Entry | 0.707 | 0.641 |
| PA12:RANTES | 1000:1 | Fusion | 0.331 | 0.156 |
| PA14:RANTES | 100:1 | Fusion | 1.6 | 1.37 |
| 2D7:RANTES | 100:1 | Fusion | 0.972 | 0.962 |
| PA12:CD4-IgG2 | 10:1 | Fusion | 0.3 | 0.31 |
| PA14:CD4-IgG2 | 1:1 | Fusion | 0.957 | 0.566 |
| 2D7:CD4-IgG2 | 1:1 | Fusion | 1.127 | 0.302 |

FIGURE 3

| | Epitopes | IC ₅₀ values (μg/ml) | | | |
|------|----------|---------------------------------|---------------------------|-----------------------------|----------------------------|
| | | cell-cell fusion inhibition | viral entry inhibition | gp120-binding inhibition | calcium flux inhibition |
| PA8 | Nt | - | - | - | - |
| PA9 | Nt/ECL2 | - | - | 0.24 | - |
| PA10 | Nt/ECL2 | - | - | 0.13 | - |
| PA11 | Nt | 25.5 | - | 0.33 | - |
| PA12 | Nt | 10.0 | - | 0.24 | - |
| PA14 | Nt/ECL2 | 1.7 | .024 | 1.58 | 6.4 |
| 2D7 | ECL2 | 1.6 | .026 | 1.38 | 45 |

FIGURE 4

| | 1 | 5 | 10 | 15 | 20 | 25 | 30 | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|-----|----|----|----|-----|-----|----|----|----|----|----|-----|-----|----|-----|----|---|----|---|---|---|----|----|-----|---|---|---|---|--|
| | M | D | Y | Q | V | S | S | P | I | Y | D | I | N | Y | T | S | E | P | C | Q | K | I | N | K | Q | I | A | A | R | |
| 2D7 | | 82 | | 80 | nd | 83 | | 82 | nd | | | | 80 | 90 | 88 | 111 | | | | | | | | | 92 | | | | | |
| PA8 | | 118 | | 78 | nd | 82 | | 80 | nd | 4 | 2 | | 0 | 2 | 95 | 100 | | | | | | | | 24 | 134 | | | | | |
| PA9 | | 15 | 13 | 0 | nd | 213 | 19 | 13 | nd | 10 | 10 | 19 | 22 | 22 | | | | | | | | | | 18 | 145 | | | | | |
| PA10 | | 21 | 14 | 0 | nd | 175 | 58 | 22 | nd | 14 | 8 | 15 | 101 | 101 | 94 | | | | | | | | | 13 | 133 | | | | | |
| PA11 | | 76 | | | 0 | nd | 112 | 80 | 81 | nd | 22 | | | 79 | 95 | 85 | | | | | | | | 22 | 148 | | | | | |
| PA12 | | 39 | | | 0 | nd | 76 | 81 | 51 | nd | 12 | | | 76 | 93 | 88 | | | | | | | | 12 | 93 | | | | | |
| PA14 | | 9 | 86 | | | nd | 85 | 88 | 89 | nd | | | | 78 | 84 | 76 | 80 | | 88 | | | | 78 | 99 | | | | | | |

| | 90 | | | | | 95 | | | | | 100 | | | | |
|------|----|----|---|---|---|----|-----|----|-----|---|-----|----|-----|----|----|
| | H | Y | A | A | A | Q | W | D | F | G | N | T | M | C | Q |
| 2D7 | | 89 | | | | | 130 | | | | | | 82 | 0 | 7 |
| PA8 | | 92 | | | | | 118 | 32 | 115 | | 86 | 86 | 39 | 10 | 34 |
| PA9 | | | | | | | 81 | 16 | 159 | | 138 | 89 | 57 | 0 | 33 |
| PA10 | | 83 | | | | | 139 | 18 | 133 | | 112 | 97 | 35 | 0 | 35 |
| PA11 | | 81 | | | | | 91 | 25 | 78 | | 90 | 94 | 35 | 10 | 36 |
| PA12 | | | | | | | 91 | 38 | 77 | | 76 | 79 | 102 | 25 | 4 |
| PA14 | | 79 | | | | | 83 | 23 | 88 | | | 86 | 80 | 8 | 7 |

| | 170 | | | 175 | | | 180 | | | 185 | | | 190 | | | | | | | | | | | | | | |
|------|-----|----|----|-----|---|---|-----|---|----|-----|----|-----|-----|----|---|----|----|----|---|---|----|----|---|---|----|---|-----|
| | R | S | Q | K | E | G | L | H | Y | T | C | S | S | H | F | P | Y | S | Q | Y | Q | F | W | K | N | F | Q |
| 2D7 | | | 17 | 0 | | | | | | | 0 | 83 | 95 | | | 20 | 80 | 82 | | | | | | | | | 102 |
| PA8 | | | | | | | | | | | | 90 | 100 | | | 15 | 90 | | | | | | | | | | |
| PA9 | | | | 15 | | | | | | | | | | | | | 78 | | | | | 95 | | | | | |
| PA10 | | | | | | | | | | | | 93 | 112 | | | 57 | | | | | 13 | | | | 12 | | |
| PA11 | | | | 19 | | | | | | | 21 | 0 | 84 | 98 | | 38 | 77 | 82 | | | 16 | | | | 10 | | |
| PA12 | | | | | | | | | | | | 138 | 130 | | | 43 | 91 | 99 | | | 24 | | | | 23 | | 92 |
| PA14 | 11 | 85 | 88 | | | | | | 80 | 24 | 9 | 100 | 83 | | | 45 | 88 | | | | | | | | | | |

| | 265 | | | | | | | | | | 270 | | | | | 275 | | | | |
|------|-----|----|----|----|----|---|---|----|---|----|-----|----|-----|----|----|-----|---|-----|--|--|
| | Q | E | F | F | F | G | L | N | N | C | S | S | S | N | R | L | D | Q | | |
| 2D7 | | | | | | | | 77 | | | | | | 78 | 77 | | | 158 | | |
| PA8 | | 78 | 25 | 9 | | | | | | | 85 | | | | 88 | | | 98 | | |
| PA9 | | | 22 | 1 | | | | | | | | | 81 | 77 | 90 | 83 | | 112 | | |
| PA10 | | | | 25 | 4 | | | | | | | 83 | 103 | | | | | 128 | | |
| PA11 | | | | | 10 | | | | | | 78 | | | | | | | 168 | | |
| PA12 | | | | | 11 | | | | | | | 83 | | 90 | 82 | 78 | | 131 | | |
| PA14 | | 82 | 82 | | | | | 80 | | 92 | 108 | 90 | 88 | | 78 | | | 112 | | |

76%-100+%

51%-75%

26%-50%

0%-25%

nd

FIGURE 5A

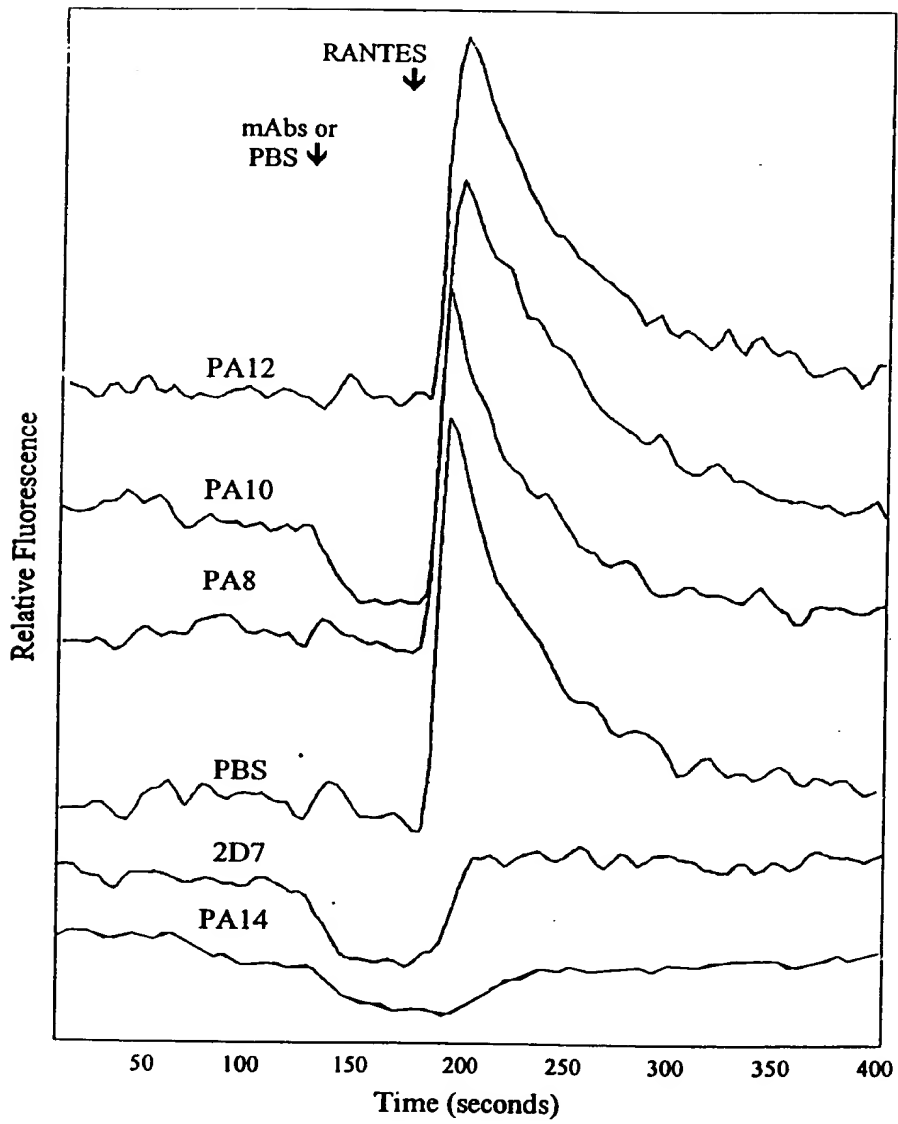
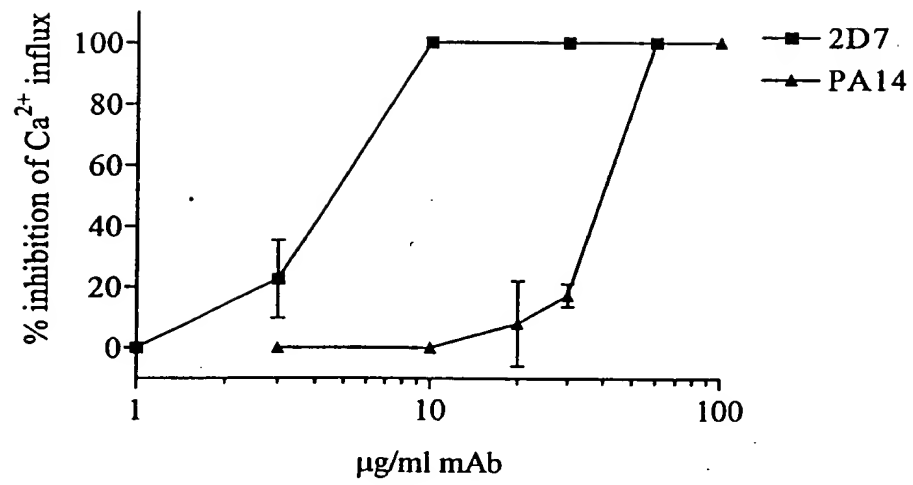
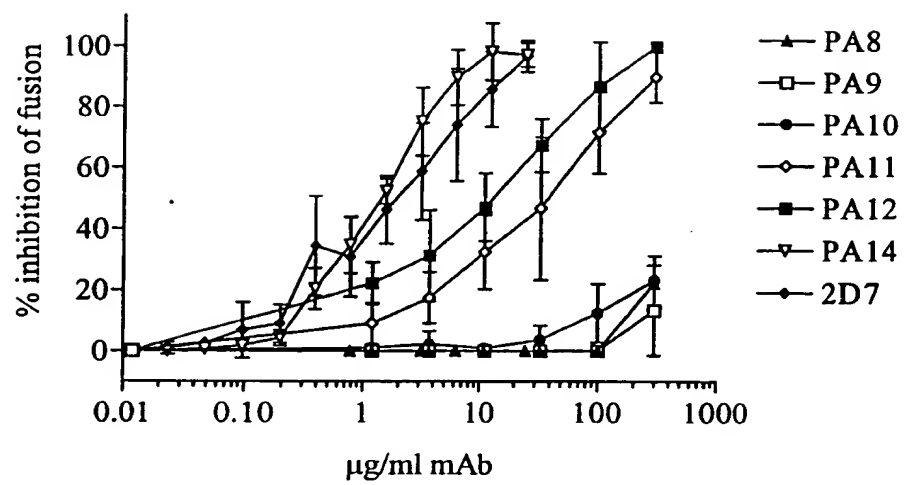


FIGURE 5B



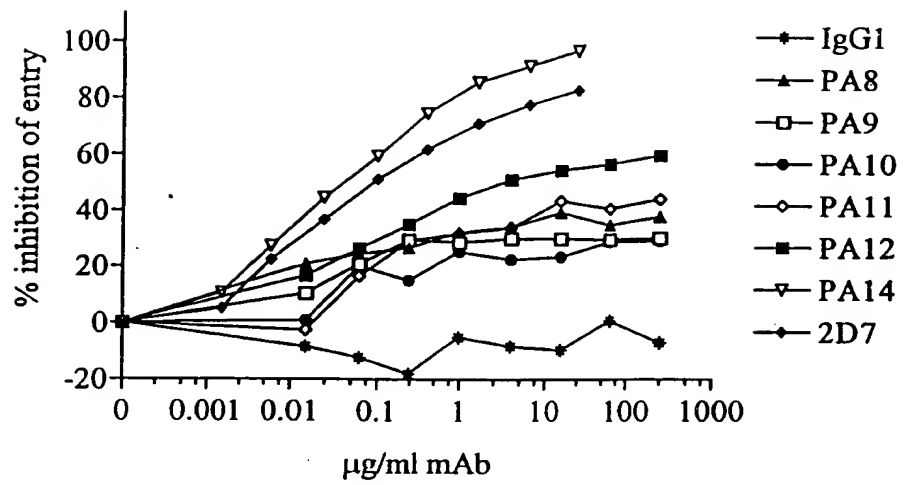
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FIGURE 6A



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FIGURE 6B



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FIGURE 6C

